### **Liam Nestelroad** **719-640-2708**

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Summary

Driven college student focused on engineering and mathematics. Experienced with CAD/Mathematica and familiar with MATLAB simulation tools. Participated in various product engineering development and design projects. Broad academic aptitude, volunteer and internship experience, developing comprehensive knowledge in a variety of industries and business environments. Articulate student who grasps new knowledge rapidly and quickly excels. Self-starter who can quickly identify areas for improvement and automation in business settings, eager to accept unfamiliar tasks to gain experience and knowledge in various areas. Effective communication and excellent customer service skills.

Education and Projects

***Bachelor’s Degree – Computer Science/Applied Mathematics*** *Expected Graduation 2022*

**University of Colorado Boulder, CO**

GPA: 3.7, Dean’s List

**Coursework:** Calculus I/2/3 for Engineers, Physics I/2, Engineering Projects, Humanities for Engineers

**SARA Bot Project**

* Modeled search and rescue assistant bot using an Arduino board, ultrasonic wave sensors, motors, and servos to move rocks away from disaster area and navigate through nonlinear routes.

**Personal Projects**

**Raspberry Pi Automation**

* “Listens” for direct messages on a slack channel using restful API requests containing specific instructions.
* Currently opens door, controls lights, and manages audio system. Future goal; integrate with Google home, security cameras and magic mirror.

**Object Recognition with Python**

* Utilize Python’s openCV2 module to identify specific shapes and colors.
* Ultimate purpose to use in conjunction with tensor flow to teach raspberry pi sign language.

**Technical Skills**

Proficient with Python, C, C++, JavaScript, AutoCAD, Unix/Linux, Bash, Raspberry Pi, Arduino, MS Office Suite.

Experience with JIRA, REST API, HTML, CSS, Docker, Virtual Machine, Vagrant, Angular, and Kubernetes.

**Experience & Internships**

University of Colorado Boulder – Build a Better Book **2017 – Present**

***Intern***

* Design and manufacture global 3D tactile books for blind children using 3D printers, laser cutters, braille printers.
* Utilize Solidworks, Inkspace, and CraftML to design pages, shapes, and textures.
* Mentor new hires on efficient printing/designing techniques and maintain lab equipment.

**University of Colorado Boulder 2018 – Present**

***Community Assistant***

* Manage front desk in various resident halls across campus. Serve as first contact to visitors/residents to ensure safety. Observe and report suspicious behavior to campus security.
* Host community unity events to encourage student support. Inspire students to pay it forward.

**Charter Communications 2018**

***Intern***

* Hired for data entry tasks, rapidly determined need for more efficient automated cataloging.
* Removed duplicates across multiple datasheets using Python and regular expressions.
* Revamped functionality on data center shipment catalog website using Angular/JavaScript. Saved to local machine in an Excel spreadsheet that automatically created a JIRA ticket via a rest API call.
* Attended lectures and tours with data center management team to learn and observe.

**Clubs**

**SHPE/MAES 2017 – Present**

Contribute to biweekly meetings focusing on the success of Latinos in engineering.

**Boy Scouts of America 2013 – 2017**

Achieved rank of Eagle Scout. Appointed to Senior Patrol Leader and Patrol Leader based on exceptional leadership skills. Raised approximately 300 dollars to fund a trail building project with help from other scouts.